

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,666 11/24/2003		Ming-Cheng Chang	CHAN3232/EM	1606
23364 75	90 06/27/2005	EXAMINER		INER
BACON & THOMAS, PLLC 625 SLATERS LANE			KANG, DONGHEE	
FOURTH FLOO			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314			2811	

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK	•

	Application No.	Applicant(s)				
Office Action Comment	10/718,666	CHANG, MING-CHENG				
Office Action Summary	Examiner	Art Unit				
	Donghee Kang	2811				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 14 Ap	1)⊠ Responsive to communication(s) filed on <u>14 April 2005</u> .					
2a) This action is FINAL . 2b) ⊠ This	•					
3) Since this application is in condition for allowan	ce except for formal matters, pro	secution as to the merits is				
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	33 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1,2,4 and 5</u> is/are pending in the appli	cation.					
4a) Of the above claim(s) is/are withdraw	n from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1,2,4 and 5</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examine	۲.					
10) The drawing(s) filed on is/are: a) acce	epted or b) \square objected to by the E	Examiner.				
Applicant may not request that any objection to the o	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 						
Copies of the certified copies of the priority documents have been received in Application No Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail Da	nte				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P	atent Application (PTO-152)				

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 2. Claims 1-2 & 4-5 are rejected under 35 U.S.C. 102(a) as being anticipated by Forbes et al. (US 6,528,837).

Forbes et al. teach a semiconductor memory device comprising (Fig.2):

A plurality of bit lines (218); a plurality of gates (212) crossing intersecting with said bit lines (Fig.1); a plurality of active areas (204), each of which is connected to one of said bit lines; a plurality of deep trenches, at least one of which communicates with two different active areas which are respectively connected with adjacent two of said bit lines, wherein the cross section of said deep trench communicates with said two different active areas.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donghee Kang whose telephone number is 571-272-1656. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve H Loke can be reached on 571-272-1657. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/718,666

Art Unit: 2811

Page 3

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Kompanylan Donghee Kang Primary Examiner

Art Unit 2811

dhk